

MULTILEVEL DATA COMPRESSION USING A SINGLE COMPRESSION
ENGINE

ABSTRACT OF THE DISCLOSURE

A single compression engine determines a plurality of discrete cosine transform (DCT) coefficients based on a discrete cosine transform of a plurality of blocks of data. The single compression engine provides first and second DCT-encoded signals. The first DCT-encoded signal uses at most t coefficient bits to represent each of the DCT coefficients. The second DCT-encoded signal uses at most u coefficient bits, where u is less than t , to represent each of the DCT coefficients.